

United States Patent and Trademark Office



Jew ?

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/089,098		06/02/1998	RANDAL LEE BERTRAM	RA998-003	2479
25299	7590	12/16/2002			
IBM CORPORATION				EXAMINER	
PO BOX 12195 DEPT 9CCA, BLDG 002				HUYNH, CONG LAC T	
RESEARCH TRIANGLE PARK, NC			27/09	ART UNIT	PAPER NUMBER
				2178	27
				DATE MAILED: 12/16/2002	~~~

Please find below and/or attached an Office communication concerning this application or proceeding.

COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 2023! www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS **AND INTERFERENCES**

Paper No. 22

Application Number: 09/089,098

Filing Date: June 02, 1998

Appellant(s): BERTRAM, RANDAL LEE

MAILED

DEC 1 2 2002

Technology Center 2100

Joscelyn G. Cockburn For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/10/02.

Real Party in Interest (1)

A statement identifying the real party in interest is contained in the brief.

Art Unit: 2178

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 42, 43-73, 82-84 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

Applicant's admitted Prior Art, Figure 4 of Appellants' specification.

Art Unit: 2178

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

I - Claim 42 rejection under 35 U.S.C. 112, first paragraph and claim 42 rejection under

35 U.S.C. 103 (a):

Claim 42 remains rejected under 35 U.S.C. 112, first paragraph, as containing subject

matter which was not described in the specification in such a way as to enable one

skilled in the art to which it pertains, or with which it is most nearly connected, to make

and/or use the invention.

Regarding claim 42, if at least one space (1st character type), at least one lower case

letter (3rd character type), and at least one lower vowel (the 2nd character type can be

any type since it is not defined) are removed from a word or a phrase, entries from

figure 2 can not become entries in figure 8 as explained in the specification. Since at

least one includes one to all, there are three cases for removing:

one space, one lower vowel and one lower case letter: Bytes Sent (column heading

34 in figure 2) may become BytesSn, not BytsS as in column 230 of figure 8

some space, some lower vowel and some lower case letter: Bytes Sent may

become BtsS, not BytsS as in column 230 of figure 8

all spaces, all lower vowels and all lower case letters: Bytes Sent may become BS.

not BytsS as in column 230 of figure 8

Page 3

Art Unit: 2178

Claim 42 remains rejected under 35 U.S.C. 103(a) as being unpatentable over the applicants admitted prior art, figure 4, of the specification.

Note: the rejection of claim 42 below (still based on figure 4) is modified for a better explanation of the claimed limitations.

Regarding independent claim 42, figures 2 and 4 disclose:

- (b) obtaining at least one entry (the table in figure 4 shows more than one entry)
- (c) abbreviating a width of the at least one entry by
- (c1) removing *at least* one of the first character type if the at least one entry includes the at least one of the first character type (removing the space in "Bytes Sent" in col 34 of figure 2 "Bytes Sent" becomes "BytesSent")
- (c2) removing *at least* one of the second character type if the at least one entry includes the at least one of the second character type (removing e in "BytesSent" "BytesSent" becomes "BytesSnt")
- (c3) removing *at least* one of the third character type if the at least one entry includes the at least one of the third character type (removing the lower case letter t "BytesSnt" becomes "BytesSn")

The prior art does not explicitly disclose defining a first character type as a space, a second character as a lower case vowel and a third character type as a lower case letter.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified the prior art to include defining the character types

Page 5

Application/Control Number: 09/089,098

Art Unit: 2178

as a space, a lower vowel, and lower character since removing the characters of these types as disclosed above suggests defining these character types.

II- Claim 43-73, 82-84 rejections under 35 U.S.C. 103(a):

Claims 43-73 remain rejected and new claims 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicants admitted prior art, figure 4, of the specification.

Regarding independent claim 43, figures 2 and 4 discloses:

- (a) obtaining the at least one entry from the at least one column (figure 2, entries in the columns 31, 32, 34, 36, 38)
- (b) abbreviating a width of the at least one entry (entry System in column 31 in figure 2 is abbreviated into Syste in column 71 in figure 4)
- (c) determining if there is another entry containing text data (not obvious shown in the figure, however, all of the column headings are abbreviated show that this step is performed)
- (d) repeating steps (b) and (c) until all of the at least one entry of the at least one column are abbreviated (all of the column headings are abbreviated shows that this step is performed)
- (e) displaying the at least one column having the at least one abbreviated entry (figure 4 displays all the column headings in abbreviated forms)

Art Unit: 2178

The prior art does not disclose explicitly step(c) determining if there is another entry containing text data. Though it is not obviously shown in the figure, the fact that every entry of the column headings are abbreviated show that for each entry the system determines if there is another entry in the table to perform the abbreviation.

Regarding claim 44, which is dependent on claim 43, as in figure 4, the at least one entry is the column heading.

Regarding claims 45 and 46, which are dependent on claims 44 and 45 respectively, figure 4 discloses removing at least one character of a second plurality of characters if the at least one column heading includes the at least one character where the second plurality of character further includes a plurality of lower case vowels (removing at least one lower case vowel "e" in "Bytes Sent").

Regarding claim 47, which is dependent on claim 44, figure 4 discloses removing at least one lower case character if the at least one column heading includes the at least one lower character (by removing the lower case character "m", "System" in column 31 in figure 2 becomes "Syste" in column 71 in figure 4).

Regarding claim 48, which is dependent on claim 44, figure 4 discloses removing at least one space if the at least one column heading includes the at least one space (the at least one space in "Bytes Sent" in column 34 of figure 2 is removed so there is no space in the column heading 74 in figure 4).

Art Unit: 2178

Note: the rejection of claim 49 below (still based on figure 4) is modified for a better explanation of the claimed limitations.

Regarding independent claim 49, figure 4 discloses:

- (b) obtaining the at least one entry (the table in figure 4 shows more than one entry)
- (c) abbreviating a width of the at least one entry by
- (c1) removing at least one character having a first character type if the at least one entry includes the at least one character and if the character type is the first character type (removing at least an upper case character "S" as a character of the first character type from "Bytes Sent" so that "Bytes Sent" becomes "Bytes ent" -- since the first character type is not defined, the first character type can be any character type)
- (c2) removing at least one lower case character if the at least one entry includes the at least one lower case character and if the character type is a second character type, the second character type being a lower case character (removing e, n, and t, which are the at least one lower case characters in "Bytes ent" so that "Bytes ent" becomes "Bytes " since the at least one lower case characters include one or more lower case characters where lower case characters can include lower vowels and lower consonants)
- (c3) removing at least one space if the at least one entry includes the at least one space and if the character type is a third character type, the third character type being a space (removing at least one space from "Bytes" so that "Bytes" becomes "Bytes" as in column 74 of figure 4)

The prior art does not disclose step (a) determining a character type.

Art Unit: 2178

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included determining a character type to the prior art to specifically point out which character type in the string needs to be removed during the abbreviation.

Regarding claim 50, which is dependent on claim 49, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the entries in figures 2 and 4 are column headings.

Regarding claims 51 and 52, which are dependent on claim 50 and 51 respectfully, the fact that all of the column headings in figure 2 are abbreviated to be the column headings in figure 4 shows that repeating steps (b) and (c) for each columns and repeating steps (a), (b), and (c) for all of the columns are performed to get the result seen in figure 4.

Note: the rejection of claims 53-55 below (still based on figure 4) are modified for a better explanation of the claimed limitations.

Regarding claims 53-55, figure 4 discloses:

■ removing at least one character having the first character type if the at least one column heading includes the at least one character and if the at least one column heading is wider than a particular column width (removing the upper case character

Page 8

Application/Control Number: 09/089,098 Page 9

Art Unit: 2178

"S" in "Bytes Sent" in column 34, figure 2 when the column width is wider than 5 – "Bytes Sent" becomes "Bytes ent")

- removing the at least one lower case character if the at least one column heading includes the at least one lower case character, if the character type is the second character type, and if the at least one column heading is wider than a particular column width (removing the lower case characters e, n, t when the column width is wider than 5 "Bytes ent" becomes "Bytes ")
- removing at least one space if the column heading includes the at least one space, if the character type is the third character type, and if the at least one column heading is wider than a particular width if the at least one column heading is wider than a particular column width (removing the space in the column heading when the column width is wider than 5 "Bytes" becomes "Bytes" as seen on #74)

Regarding claim 56, which is dependent on claim 55, figure 4 discloses truncating the at least one column heading if the width of the at least one column heading is greater than the particular column width and if the at least one column heading does not contain any character of the first character type, the second character type, or the third character type (the column heading "Bytes Received" is truncated since the width is wider than 5 and it does not contain the space, which is the third character type. Column heading 32 becomes column heading 72 "Bytes" in figure 4).

Art Unit: 2178

Claims 57-70 are for a computer-readable medium of method claims 43-56, and are rejected under the same rationale.

Claims 71-73 are for a system of method claims 49, 50, 53-56, and are rejected under the same rationale.

Note: the rejection of claim 84 below (still based on figure 4) is modified for a better explanation of the claimed limitations.

Regarding claim 84, which is dependent on claim 43, figure 4 discloses that the abbreviating step further includes the step of <u>sequentially removing</u> predetermined individual characters until the at least one entry has a width equivalent to a predetermined number of characteristics:

- removing a space in the column heading if the column heading width is wider than a particular column width (the space in "Bytes Sent" of column 34 is removed when the column heading width is wider than 5 -- "Bytes Sent" becomes "BytesSent")
- removing an upper character in the column heading if the column heading width is wider than a particular column width (next, the upper case character "S" in "BytesSent" is removed when the column heading width is wider than 5 "BytesSent" becomes "Bytesent")
- removing the lower case characters in the column heading if the column heading width is wider than a particular column width (next, the lower case characters t, n, and e are removed when the column heading width is wider than 5 "Bytesent" becomes "Bytes")

Art Unit: 2178

- removing ends when the column heading width is 5 ("Bytes" width is 5 so removing stops)

It is noted that since in claim 43, the character types are not defined, the removed characters in claim 84 can be any type and the sequential removing in claim 84 can happen in any order.

Note: the rejections of claims 82 and 83 below (still based on figure 4) are modified for a better explanation of the claimed limitations.

Regarding independent claim 82, figure 4 discloses:

- (b) providing the character string (column headings in figure 4 are provided)
- (c) abbreviating a width of the at least one entry by
- (c1) removing at least a first character if the character string includes the at least first character that is defined as a character type of the N character types (removing at least a space as a character of the first character type from "Bytes Sent" since a space can be one of the N character types -- "Bytes Sent" becomes "BytesSent")
- (c2) removing at least a second character if the character string includes the at least second character that is defined as a character type of the N character types (removing e, n, and t, which are the at least one lower case characters in "BytesSent" since lower case character can be one of the N character types -- "BytesSent" becomes "BytesS")
- (c3) removing at least a third character if the character string includes the at least third character that is defined as a character type of the N character types (removing at

Art Unit: 2178

least an upper case character from "BytesS" since upper case character can be one of the N character types – "BytesS" becomes "Bytes" as in column 74 of figure 4)

Figure 4 does not explicitly disclose limitation (a) for determining N character types, N greater than 1.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included determining N character types where N is greater than 1 to the prior art since the abbreviation in the prior art shows <u>the removing the characters of different types</u>, which are more than one types of characters. In other words, the N character types applied must be greater than 1.

Regarding claim 83, which is dependent on claim 82, figure 4 discloses that at the completion of each of the acts c1, c2 and c3 comparing a remaining portion of the character string with the character string size and terminating character removal if the remaining portion of the character string equals the character string size (a space in "Bytes Sent" in column 34 of figure 2 is removed so column heading 74 does not include a space when the column width is wider than 5; then lower case characters e, n, t are removed so column heading 74 of figure 4 does not include the last e, n, t when the column width is still wider than 5; the upper case character "S" in "BytesS" is removed so that "BytesS" becomes "Bytes" when the column width is wider than 5; removing stops when the column width is 5 so that the final result is "Bytes" as seen in #74).

Application/Control Number: 09/089,098 Page 13

Art Unit: 2178

(11) Response to Argument

I – Response to arguments of claim 42 rejection under 35 U.S.C. 112, first

paragraph:

Appellants argue that claim 42 rejection under 35 USC 112, first paragraph is an error since Examiner stated that "the second character type can be any type since it is not defined" (appeal brief, page 5, 2nd paragraph). Appellants further argue that since the specification supports the steps b, c, c1-c3 of claim 42 in figures 5-7, the claim is patentable under 35 USC 112, first paragraph (appeal brief, page 6, 2nd paragraph). Examiner agrees.

Examiner made an inadvertent mistake in stating that "the second character type can be any type since it is not defined" which was based on the claim rejection prior the claim amendment.

However, since the claim now clearly define the first character type as a space, <u>the</u> <u>second character type as a lower case vowel</u>, and the third character type as a lower case letter, the claim actually <u>does not make a difference</u> from the <u>assumption in the</u> <u>112, first paragraph rejection that the second character type, which is not defined and so can be any type, is a lower case vowel</u> (see the 112 (1) rejection of claim 42 in the Grounds of Rejection section above).

A correction is made for appropriately address the 112, first paragraph rejection of claim 42 as follows:

Regarding claim 42, if at least one space (1st character type), at least one lower vowel (the 2nd character type), and at least one lower case letter (3rd character type) are

Page 14

Application/Control Number: 09/089,098

Art Unit: 2178

removed from a word or a phrase, entries from figure 2 can not become entries in figure 8 as explained in the specification. Since "at least one" includes "one or more", there are three cases for removing:

- one space, one lower vowel and one lower case letter: Bytes Sent (column heading
 34 in figure 2) may become BytesSn, not BytsS as in column 230 of figure 8
- some space, some lower vowel and some lower case letter: Bytes Sent may become BtsS, not BytsS as in column 230 of figure 8
- all spaces, all lower vowels and all lower case letters: Bytes Sent may become BS,
 not BytsS as in column 230 of figure 8

Therefore, claim 42 remains rejected under 35 USC 112, first paragraph because the claim *does not address the invention* in such a way that a skilled person in the art can apply to use the invention.

In particular, steps b, c, c1-c3 disclose abbreviating at least one entry by "removing at least one of the first character type if the at least one entry includes the at least one of the first character type", "removing at least one of the second character type if the at least one entry includes the at least one of the second character type", and "removing at least one of the second character type if the at least one entry includes the at least one of the second character type."

It is clear that these steps are for merely removing characters of some character type and do not care the size of the entry and how to remove a character in the entry as disclosed the specification of the invention (pages 12-16 and figure 7).

Art Unit: 2178

Though steps b, c, c1-c3 are disclosed in the specification as argued, <u>claiming</u> <u>abbreviation by merely removing</u> at least one of the characters of the defined character types <u>without special features of the invention as disclosed in the specification</u> produces subject matter which is unable for one skilled in the art to make or use the invention.

Particularly, by applying merely the removing steps as claimed, <u>figure 2 can not result in figure 8 which is illustrated for the abbreviation technique of the invention</u> but instead can be interpreted in any way as pointed out in the 112, first paragraph rejection as mentioned above.

Also, it is noted that the third character type defined as a *lower case letter* is indefinite since a lower case letter can be either a *lower vowel* or a *lower consonant*.

II– Response to arguments of claims 42-73, and 82-84 rejections under 35 U.S.C. 103 (a):

- Appellants argue that the rejection of claim 42 based on figure 4 (admitted as a prior art) in the specification of the invention is an error since figure 4 teaches a method of truncation whereas the invention is for a method of abbreviation

Examiner respectfully disagrees.

Truncation or abbreviation has the same feature of shortening a character string by removing at least one character of the string.

Consider the column heading 34 in figure 2 and column heading 74 of figure 4, the "Bytes" in figure 4 shows that at least one space is removed from the "Bytes Sent" in

Page 16

Application/Control Number: 09/089,098

Art Unit: 2178

figure 2, at least one lower case vowel is removed from "Bytes Sent" (e is removed), and at least one lower case letter is removed from "Bytes Sent" (t is removed).

It is clear that in figure 4, removing at least one space, removing at least one lower vowel, and removing at least one lower case letter are performed since the column headings in figure 4 are shortened compared with the original column headings in figure 2 and as mentioned in the Grounds of Rejection above. This part of the rejection is repeated for convenience:

- (c) abbreviating a width of the at least one entry by
- (c1) removing *at least* one of the first character type if the at least one entry includes the at least one of the first character type (the space in "Bytes Sent" in col 34 of figure 2 is removed— "Bytes Sent" becomes "BytesSent")
- (c2) removing *at least* one of the second character type if the at least one entry includes the at least one of the second character type (the lower case vowel e is removed from "BytesSent" "BytesSent" becomes "BytesSnt")
- (c3) removing *at least* one of the third character type if the at least one entry includes the at least one of the third character type (the lower case letter t is removed from "BytesSnt" "BytesSnt" becomes "BytesSn")

Figure 4 may include more steps to remove S and n so that "Bytes Sent" finally becomes "Bytes" as seen in #74. The prior art still can be applied since the claim recites "a method **comprising** the steps of ..." That means the claim recites an open ending method.

Art Unit: 2178

Claim 42, therefore, is not patentable over figure 4 since **figure 4 discloses at least** the removing steps as claimed.

- Appellants argue that claims 43 and 44 are not obvious over figure 4 because the process used in figure 4 using truncation whereas the process of the claims is for abbreviation (appeal brief, page 10, 2nd paragraph to page 12, 3rd paragraph). Examiner respectfully disagrees.

Figure 4 discloses and suggests the limitations (a)-(e) of claim 43 as mentioned in the Grounds of Rejection section above. Claim 43 does not include any specific detail how the abbreviation of the data within the column is performed. It is the examiner's opinion that data could have been abbreviated by merely removing the characters for shortening a character string.

- Appellants argue that "In abbreviation as set forth in claims 43 and 44 reduction is done by removing individual or separate defined character. Thus, abbreviation as recited in the claim covers a different process from the prior art and makes claims 43 and 44 unobvious" (appeal brief, page 10, 5th paragraph).

Examiner respectfully disagrees.

Claims 43 and 44 do not mention <u>removing defined characters</u>. The only broad limitation about reduction is "abbreviating a width of the at least one entry." As disclosed in figure 4, <u>all column headings whose widths are shortened compared with</u>

Page 17

Page 18

Art Unit: 2178

the column headings in figure 2, thereby creating abbreviated (shortened) headings. Figure 4, again, discloses the abbreviation as claimed.

- Regarding claim 84, which is dependent on claim 43, Appellants argue that figure 4 does not disclose the abbreviating step (appeal brief, page 12, 6th paragraph to page 13, 1st paragraph).

Examiner disagrees.

Claim 43 states "abbreviating a width of the at least one entry." Claim 84 states "the abbreviating step further includes the steps of sequentially removing predetermined individual characters until the at least one entry has a width equivalent to a predetermined number of characteristics."

It is clear that the abbreviating step <u>as claimed only includes sequentially removing</u>

<u>characters</u> until the entry has a predetermined width **in general** <u>without mentioning</u>

<u>what type of characters to be removed **and** how to remove the characters (e.g. from the last character to the first character as disclosed in the specification). It is also noted that the character types are not defined in claim 43 and claim 84.</u>

Therefore, sequentially removing characters can be interpreted as in the rejection of claim 84 in the Grounds of Rejection above. That part of rejection is repeated for convenience:

- removing a space in the column heading if the column heading width is wider than a particular column width (the space in "Bytes Sent" of column 34 is removed when the column heading width is wider than 5 -- "Bytes Sent" becomes "BytesSent")

Application/Control Number: 09/089,098 Page 19

Art Unit: 2178

- removing an upper character in the column heading if the column heading width is wider than a particular column width (next, the upper case character "S" in "BytesSent" is removed when the column heading width is still wider than 5 – "BytesSent" becomes "Bytesent")

- removing the lower case characters in the column heading if the column heading width is wider than a particular column width (next, the lower case characters t, n, and e are removed when the column heading width is still wider than 5 "Bytesent" becomes "Bytes"
- removing ends when the column heading width is 5 ("Bytes" width is 5 so removing ends)
- Regarding independent claim 49, Appellant argue that the claim rejection is an error since figure 4 does not teach abbreviation as in the claimed limitations (b) and (c) but instead truncation. Appellants further argue that combining limitations (b) and (c) with skill in the art at the time of the invention to provide limitation (a) is improper since the prior art teaches truncation which is in opposite to abbreviation as claimed (appeal brief, page 14, 2nd and 3rd paragraphs).

Examiner respectfully disagrees.

Abbreviation or truncation is for shortening a word or a phrase by removing characters.

Claim 49 claims abbreviating by "removing at least one character having a first character type if the at least one entry includes the at least one character and if the character type is the first character type, removing at least one lower case character

Art Unit: 2178

if the at least one entry includes the at least one lower case character and if the character type is a second character type, the second character type being a lower case character, and *removing at least one space* if the at least one entry includes the at least one space and if the character type is a third character type, the third character type being a space."

Figure 4 discloses removing characters since the entries in the column headings, which include characters of different types, are shortened compared with the column headings of figure 2.

Claim 49, therefore, can be interpreted as mentioned in the Grounds of Rejection above. The rejection is repeated as follows:

Regarding independent claim 49, figure 4 discloses:

- (b) obtaining the at least one entry (the table in figure 4 shows more than one entry)(c) abbreviating a width of the at least one entry by
- (c1) removing at least one character having a first character type if the at least one entry includes the at least one character and if the character type is the first character type (removing at least an upper case character "S" as a character of the first character type from "Bytes Sent" so that "Bytes Sent" becomes "Bytes ent" -- since the first character type is <u>not defined</u>, the first character type can be <u>any character type</u>)
- (c2) removing at least one lower case character if the at least one entry includes the at least one lower case character and if the character type is a second character type, the second character type being a lower case character (removing e, n, and t, which are the at least one lower case characters in "Bytes ent" so that "Bytes ent"

Art Unit: 2178

Page 21

becomes "Bytes " since the <u>at least one</u> lower case characters include <u>one or more</u> lower case characters where lower case characters can include lower vowels and lower consonants)

(c3) removing at least one space if the at least one entry includes the at least one space and if the character type is a third character type, the third character type being a space (removing at least one space from "Bytes" so that it becomes "Bytes" as in column 74 of figure 4)

The prior art does not disclose step (a) determining a character type.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included determining a character type to the prior art to specifically point out which character type in the string needs to be removed during the abbreviation.

As stated, during the abbreviation, the *characters of different types* as claimed are *removed* from the string. This fact suggests that the character types are determined for removing. Therefore, a suggestion of a combination of limitations (b) and (c) to (a) is proper.

Claims 50-52 are rejected as being dependent on independent claim 49.

- Regarding claims 53-55, Appellants argue, "it appears the examiner is using teachings gleaned from applicant's disclosure to support the rejection of claims 53-55.

The basis for applicant's position is that the prior art set forth in appellant's specification

Art Unit: 2178

and relied on by the examiner teaches "truncation" which is in opposite to "abbreviation" taught and claimed by appellant" (appeal brief, page 14, two last paragraphs).

Appellants further argue that columns 72 and 74 of figure 4 (prior art) are both identified as "Bytes" for the non-shortened expressions "Bytes Received" and "Bytes Sent" as in figure 2, whereas figure 8, by applying abbreviation technique of the invention, said non-shortened expressions become "Bytes R" and "Bytes S", which differentiate the two column headings (appeal brief, page 15, 1st paragraph).

Examiner sees the difference Appellants point out in columns 72 and 74 of figure 4 and columns 220 and 230 of figure 8.

However, claims 53-55 state "removing at least one character having the first character type if the at least one column heading includes the at least one character and if the at least one column heading is wider than a particular column width, removing the at least one lower case character if the at least one column heading includes the at least one lower case character, if the character type is the second character type, and if the at least one column heading is wider than the particular column width, removing at least one space if the at least one column heading includes the at least one space, if the character type is the third character type, and if the at least one column heading is wider than the particular column heading is wider than the particular column width."

Figure 4 discloses that removing characters of three different character types from a column heading is performed if the column heading is wider than the particular column width as mentioned in the Grounds of Rejection section above. The rejection is repeated as follows:

Art Unit: 2178

Regarding claims 53-55, figure 4 discloses:

■ removing at least one character having the first character type if the at least one column heading includes the at least one character and if the at least one column heading is wider than a particular column width (removing the upper case character "S" in "Bytes Sent" in column 34, figure 2 when the column width is wider than 5 — "Bytes Sent" becomes "Bytes ent")

Page 23

- removing the at least one lower case character if the at least one column heading includes the at least one lower case character, if the character type is the second character type, and if the at least one column heading is wider than a particular column width (removing the lower case characters e, n, t when the column width is wider than 5 "Bytes ent" becomes "Bytes ")
- removing at least one space if the column heading includes the at least one space, if the character type is the third character type, and if the at least one column heading is wider than a particular width if the at least one column heading is wider than a particular column width (removing the space in the column heading when the column width is wider than 5 "Bytes " becomes "Bytes" as seen on #74)

Figure 4, therefore, discloses the abbreviation as claimed.

Claims 57-70, 71-73 are for a computer-readable medium of method claims 43-56, and for a system of method claims 49-56, and therefore remain rejected under the same rationale.

- Regarding independent claim 82, Appellants argue that Examiner's statement that limitations (b) and (c) are disclosed in Figure 4 (prior art) appears to be in error since figure 4 discloses truncation in contrast to the abbreviation as claimed that requires several passes through the entry removing defined characters on each pass through (appeal brief, page 17, the last two paragraphs).

Examiner respectfully disagrees.

Claim 82 claims abbreviating a character string by selectively **removing characters** as set forth in c1, c2, and c3 of the claim as mentioned in the Grounds of Rejection above. The rejection is repeated for convenience:

Regarding independent claim 82, figure 4 discloses:

- (b) providing the character string (column headings in figure 4 are provided)
- (c) abbreviating a width of the at least one entry by
- (c1) removing at least a first character if the character string includes the at least first character that is defined as a character type of the N character types (removing at least a space as a character of the first character type from "Bytes Sent" so that "Bytes Sent" becomes "BytesSent" since a space can be one of the N character types)
- (c2) removing at least a second character if the character string includes the at least second character that is defined as a character type of the N character types (removing e, n, and t, which are the at least one lower case characters in "BytesSent" so that "BytesSent" becomes "BytesS" since lower case character can be one of the N character types)

Art Unit: 2178

(c3) removing at least a third character if the character string includes the at least third character that is defined as a character type of the N character types (removing at least an upper case character from "BytesS" so that it becomes "Bytes" as in column 74 of figure 4 since upper case character can be one of the N character types)

Since figure 4 discloses removing characters as set forth in c1, c2, and c3 of the claim, figure 4 discloses the abbreviation as claimed.

Claim 83, which is dependent on claim 82, remains rejected since figure 4 discloses terminating removal if the remaining portion of the character string equals the character string size as mentioned in the Grounds of Rejection above. The rejection is repeated for convenience:

Regarding claim 83, which is dependent on claim 82, figure 4 discloses that at the completion of each of the acts c1, c2 and c3 comparing a remaining portion of the character string with the character string size and terminating character removal if the remaining portion of the character string equals the character string size (a space in "Bytes Sent" in column 34 of figure 2 is removed so column heading 74 does not include a space when the column width is still wider than 5; then lower case characters e, n, t are removed so column heading 74 of figure 4 does not include the last e, n, t when the column width is still wider than 5; the upper case character "S" in "BytesS" is removed so that "BytesS" becomes "Bytes" when the column width is still wider than 5; removing stops when the column width is 5 so that the final result is "Bytes" as seen in #74).

Art Unit: 2178

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Cong-Lac Huynh Examiner Art Unit 2178

clh

December 10, 2002

Conferees Joseph Field Feild Full

TECHNOLOGY CENTER 2100

JOSCELYN G COCKBURN IBM CORPORATION 972/B656 P O BOX 12195 RESEARCH TRIANGLE PARK, NC 27709